



## Science Committee Meeting Notes

June 11, 2018 – Coachella Corporate Yard

Prepared by the Consensus Building Institute

### Meeting in Brief

- CDFW shared the documents and requirements that will inform the fish and wildlife goals for the SSMP Phase 1 plan. CDFW also sought future input on its preliminary development of a Monitoring and Adaptive Management Plan (MAMP) for the SSMP, specifically including 1) a preliminary Table of Contents shared with the Committee, 2) use of the USGS 2013 Salton Sea Monitoring and Assessment Plan, and 3) Salton Sea survey scheme.
- Carol Roberts requested input from Committee members on any or all of the above by **July 20**, so she can compile the input and send it to the State by July 31.
- Audubon California shared two presentations with the Committee – a summary of bird surveys at the Salton Sea and water budget analysis – for informational purposes and any input from Committee members.

[Click here](#) for link to meeting materials and presentations.

### Action Items

Timeline	Who	What
July 20	Committee members	Input to Carol on any of the documents or information shared by CDFW (see above), Audubon California, and the Regional Water Quality Control Board (see below).
June 29	Carol	Email materials and presentations presented today to Committee for follow-up input
July 31	Carol	Email compiled Committee input to CDFW on the topics shared with the Committee today (see above)
July 31	Committee members	Email to Carol any ideas for Salton Sea forum (e.g., suggested presentations)

### State Updates

- DWR provided updates on several projects. New River West (south end) is in the planning phase, with the start of construction scheduled for 2019. Alternatives are currently being developed for the North Lake, which will include 2000 acres of wetlands and is being implemented in coordination with the Salton Sea Authority. SCH is mostly through the design-bid-build phase, with construction to start this year. Alcott Wetlands has been surveyed for birds and fish, although no specific results were provided. DWR is in the early design phase of a small project (approximately 290 acres) that will capture flows from the Q, R and S drains in an effort to maintain fish connectivity and the existing fresh-water marsh habitat. Samples were collected for selenium analysis. When available, the results will provide the State with a larger selenium data set to better understand conditions and potential risk. Planning for Morton Bay will follow these efforts.
- On a programmatic level, the State is updating chapters in the Phase 1/ 10 Year SSMP to reflect the updates shared today. It is performing a new set of fish surveys, including redoing

last year's gill netting survey with the US Fish and Wildlife Service. Aerial surveys for birds have been conducted and will be repeated later in the year.

- The State Department of Fish and Wildlife (CDFW) shared current a summary of SSMP tasks, which include developing fish and wildlife goals for the State's 10 Year/Phase 1 plan. CDFW shared with the Committee a summary of the existing documents and requirements that will inform these targets and requested the Committee's input regarding whether anything is missing from this list. CDFW plans to seek input from Committee on a preliminary set of fish and wildlife goals in the near future.
- CDFW is developing a Monitoring and Adaptive Management Plan (MAMP) for the SSMP and shared its preliminary Table of Contents with the Committee for input. In developing the MAMP, CDFW requested input on its use of the USGS 2013 Salton Sea Monitoring and Assessment Plan, available at <https://pubs.usgs.gov/of/2013/1133/pdf/ofr20131133.pdf>. CDFW also requested guidance from Committee members on Salton Sea surveys, and particularly in designing a flexible survey scheme that will be adaptable to changes in shoreline, depth, etc.
- Carol Roberts requested input from Committee members on any or all of the above by July 20, so she can compile the input and send it to the State by July 31.
- CDFW also reported on recent staff turnover, which has delayed some of CDFW's work on the SSMP.

#### **Questions/Input from Committee Members**

- How is the State quantifying and surveying birds at the Sea? There was a discussion of current aerial surveys around perimeter (for larger birds), the results of which have not been analyzed yet. The State plans to do other surveys in parallel. A committee member emphasized the importance of designing surveys in light of future changing habitat. See later Audubon presentation.
- There was a brief discussion about depth for gill netting/sampling (deepest is 8-9 feet), past sampling done in shallower water (no seining in shallow water is currently planned), and what has been sampled (drains have been surveyed for pupfish).

## **Audubon California Presentations to the Science Committee**

### **Salton Sea Waterbird Surveys, Current Trends and Analysis (Dan Orr, Spatial Ecologist & Andrea Jones, Director of Bird Conservation)**

Dan shared Audubon's presentation with the Committee, available [here](#). The Committee was invited to ask questions and share any input today, and to provide follow-up comments by July 20.

#### **Discussion and questions included the following topics:**

- Several questions were posed regarding the determination that 2013 was such a seminal year, and what changes may have had such a dramatic impact on bird counts. Dan indicated that there was a pattern, since a key issue in his analysis is the *rate* of change, rather than absolute change over time. Audubon suggested this may be a question for IID regarding local conditions and irrigation changes.
- Discussion ensued about monitoring other locations to provide more context about the overall flyway and what's happening to the missing birds. It was suggested that the birds weren't missing, but that the timing of the surveys may have been the problem (particularly for Eared Grebes). Ideally, Audubon would survey saline lakes throughout the West at the same time, but this is challenging when standardized surveys at this scale are lacking.

- Another question was whether the data have been correlated with changes in prey species, in addition to salinity. A simple survey of invertebrates would help provide insights into why fish-eating birds are nearly gone but not shorebirds. This could be a useful intermediate step, beyond salinity. Audubon is interested in doing this. It was suggested that it could be useful to see what was done in the 1999-2000 study, in order to help identify key species and try to replicate the protocols to understand changes over time. Audubon is working to get information and involvement from key people who monitored these birds over decades.
- Committee members also suggested potentially adding survey sites and times, in both spring and fall. Audubon is seeking volunteers to help do this.

### **Salton Sea Water Demand Estimation (John Dickey, PlanTierra, for Audubon California)**

Dr. Dickey discussed a water budget model that PlanTierra has developed as a potential tool/approach to help meet discreet habitat targets at the Salton Sea. The presentation is available [here](#). The Committee was invited to ask questions and share any input today or along with comments on other topics by July 20.

### **Discussion and questions included the following:**

- After seeing the bird survey results and the water budget model, committee members raised the question of how to use the information to develop species habitat/objectives. The Chair indicated a desire to pursue realistic habitat expectations in the 10-Year Plan. We have limited water and other resources and need to work within those constraints, as a Sea-to-Sea concept that would reduce those restrictions is many years off.

## **Updates to Science Committee**

**Scot Stormo, Colorado River Regional Water Quality Control Board – Update on Salinity Tool.** At the last Science meeting, there were questions about what quantities are needed for water import and export, looking at variables such as salinity and elevation of the Salton Sea. This concept assumes a Sea-to-Sea transfer of adequate water to maintain salinity and elevation at current levels (although past levels could be evaluated also). Scot and the RWQCB created a spreadsheet to calculate the volume of water that would have to be exchanged between the Salton Sea and the Sea of Cortez to accomplish that goal, which Scot found to be approximately 50 percent of the current volume of the Sea. Scot will circulate the spreadsheet among the Committee for input. The State suggested this may help us determine if water import is the solution, given the significant issues involved.

**Salton Sea Issues Forum** is a developing effort to bring together researchers and policy makers from the different disciplines, akin to the Great Salt Lake Issues Forum hosted by the Friends of Great Salt Lake. Mike Cohen from the Pacific Institute, who is helping to develop the Forum, explained there would be opportunities to present research, hear updates from the State, and learn about industry-related proposals and other innovations, with meetings envisioned every couple of years. Mike asked Committee members to send ideas regarding topics, frequency, locations, and other suggestions to Carol, who will forward them to Mike.

## Public Comments

- Why isn't there a robust discussion on the Science Committee of the public health impacts from the blowing playa, such as the Committee is having regarding wildlife habitat? Earl Withycombe from the California Air Resources Board explained that the emissivity of the playa has been measured as part of this process, and it is on the order of 330 tons/year of PM<sub>10</sub> (the metric used for small particulate matter that poses a health risk). In comparison, measured emissions from nearby desert lands are on the order of 44,000 tons/year of PM<sub>10</sub>. In particular, we are seeing high dust generation from desert lands on the west side of the Salton Sea, which poses a much greater hazard to the communities on the west side than the playa lands, given that the prevailing winds are from the west and northwest. The California Air Resources Board is working with IID to establish non-habitat measures for dust control (e.g., deep tilling) that can be used for interim dust management on the playa that are both effective and inexpensive. The potential toxicity of chemicals associated with the particulates was also evaluated, and it was determined that chemical toxicity is not an issue with these materials. A report from IID and their consultants on these air quality issues should be available in a month or so.
- The question was posed whether we should be discussing air quality topics at all, as opposed to referring these issues to the Air Quality Committee. The Committee suggested increasing our expertise in the air quality arena so that we could provide more helpful feedback to the State. The Chair will contact potential candidates identified by the Committee.

## Meeting Attendees

Several community, Tribal, and agency stakeholders attended the meeting, in addition to the following Committee members and state staff liaisons.

### State of California

Bruce Wilcox, Assistant Secretary for the Salton Sea

Vivien Maisonneuve, DWR

Heather Pert, CDFW

Sam Haynes, CDFW

### Members Attending (some by phone)

Present			
✓	Carol	Roberts	CHAIR. USFWS (Selenium and Other Contaminants)
✓	Tom	Anderson	USFWS (Avian)
	Michael	Anderson	UC Riverside (Water & Water Quality)
	Doug	Barnum	Retired, USGS (Selenium and other Contaminants)
✓	Steve	Bigley	Coachella Valley Water District (Water & Water Quality)
✓	Tim	Bradley	UC Irvine (Aquatic)
	Steve	Charlton	IID
✓	Mike	Chotkowski	USGS (Biology)
✓	Amato	Evan	UCSD Scripps
✓	Andrea	Jones	Audubon California (Avian)
	Kurt	Leuschner	College of the Desert (Biology)
	Jeong-Hee	Lim	Regional Water Quality Control Board (Water Quality)
✓	Jason	Low	South Coast Air Pollution Control Dist. (Air Quality)

✓	Robert	McKernan	Avian consultant (Birds)
✓	Kathy	Molina	LA County Natural History Museum
	Alberto	Ramirez	Torres Martinez Tribe
✓	Geoff	Schladow	UC Davis (Water and Water Quality)
✓	Dave	Shuford	Point Blue Conservation (Birds)
✓	Scot	Stormo	Colorado River Regional Water Quality Control Board
✓	Ramona	Swenson	ESA Associates (Aquatic)
✓	Earl	Withycombe	CARB

### Facilitator

CBI Facilitator Ryan Golten, [rgolten@cbuilding.org](mailto:rgolten@cbuilding.org), 303-880-9521